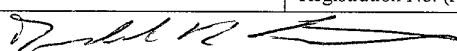


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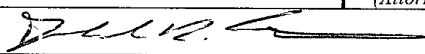
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

PTO/SB/05 (11-00)
Approved for use through 10/31/2002. OMB 0651-0032

UTILITY PATENT APPLICATION TRANSMITTAL (Only for new nonprovisional applications under 37 CFR 1.53(b))		Attorney Docket No. 2433-11	
First Inventor Shang-Ho TSAI et al		Title METHOD AND APPARATUS FOR SELECTING AN OPTIMAL SWAPPING TECHNIQUE IN DISCRETE MULTI-TONE SYSTEM	
Express Mail Label No.			
APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents		ADDRESS TO: Commissioner for Patents Box Patent Application Washington, DC 20231	
1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)		7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)	
2. <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)	
3. <input checked="" type="checkbox"/> Specification [Total Pages 27] (preferred arrangement set forth below)		a. <input type="checkbox"/> Computer Readable Form (CRF)	
- Descriptive title of the invention		b. Specification Sequence Listing on:	
- Cross Reference to Related Applications		i. <input type="checkbox"/> CD-ROM or CD-R (2 copies; or	
- Statement Regarding Fed sponsored R & D		ii. <input type="checkbox"/> paper	
- Reference to sequence listing, a table, or a computer program listing appendix		c. <input type="checkbox"/> Statements verifying identity of above copies	
- Background of the Invention		ACCOMPANYING APPLICATION PARTS	
- Brief Summary of the Invention		9. <input type="checkbox"/> Assignment Papers (cover sheet & document(s))	
- Brief Description of the Drawings (if filed)		10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <input type="checkbox"/> Power of (when there is an assignee) Attorney	
- Detailed Description		11. <input type="checkbox"/> English Translation Document (if applicable)	
- Claim(s)		12. <input type="checkbox"/> Information Disclosure <input type="checkbox"/> Copies of IDS Statement (IDS)/PTO-1449 Citations	
- Abstract of the Disclosure		13. <input type="checkbox"/> Preliminary Amendment	
4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) Figs. 1-14 [Total Sheets 8]		14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized)	
5. Oath or Declaration [Total Sheets 3]		15. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed)	
a. <input checked="" type="checkbox"/> Newly executed (original or copy)		16. <input type="checkbox"/> Request and Certification under 35 U.S.C. 122 (b)(2)(B)(I). Applicant must attach form PTO/SB/35 or its equivalent.	
b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed)		17. <input type="checkbox"/> Other _____	
i. <input type="checkbox"/> <u>DELETION OF INVENTOR(S)</u> Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b)			
6. <input checked="" type="checkbox"/> Application Data Sheet See 37 CFR 1.76			
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:			
<input type="checkbox"/> Continuation <input type="checkbox"/> Divisional <input type="checkbox"/> Continuation-in-part (CIP)		of prior application No. _____ / _____	
Prior application information: _____		Examiner: _____ Group / Art Unit: _____	
For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation <u>can only</u> be relied upon when a portion has been inadvertently omitted from the submitted application parts.			
19. CORRESPONDENCE ADDRESS			
<input checked="" type="checkbox"/> Customer Number or Bar Code Label		22204 (Insert Customer No. or Attach bar code label here)	
Name		Donald R. Studebaker	
Address		NIXON PEABODY LLP 8180 Greensboro Drive, Suite 800	
City		McLean	State VA Zip Code 22102
Country		United States	Telephone (703) 790-9110 Fax (703) 883-0370
Name (Print/Type)		Donald R. Studebaker	Registration No. (Attorney/Agent) 32,815
Signature			Date 05/07/01

Burden Hour Statement: this form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Box Patent Application, Washington, DC 20231.

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1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to Deposit Account Number: 19-2380 (1440-11) Deposit Account Name: NIXON PEABODY LLP 8180 Greensboro Drive Suite 800 McLean, Va. 22102 <input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27				3. ADDITIONAL FEES <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English transaction</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for <i>ex parte</i> reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>390</td><td>216</td><td>195</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>890</td><td>217</td><td>445</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,390</td><td>218</td><td>695</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,890</td><td>228</td><td>945</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>310</td><td>219</td><td>155</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>310</td><td>220</td><td>155</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>270</td><td>221</td><td>135</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - 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Name (Print/Type)		Donald R. Studebaker		Registration No.		32,815																																																																																																																																																																																																							
Signature				Telephone		(703) 790-9110																																																																																																																																																																																																							
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